

Title (en)
Stable carotenoid emulsions for parenteral administration

Title (de)
Stabile zur parenteralen Verabreichung geeignete Carotinoid-Emulsionen

Title (fr)
Emulsions stables de caroténoïdes pour l'administration parentérale

Publication
EP 0800824 A1 19971015 (DE)

Application
EP 97103483 A 19970304

Priority
DE 19609476 A 19960311

Abstract (en)
A stable oil-in-water emulsion (A), suitable for parenteral administration, has an oil phase, based on physiologically acceptable oil or fat, containing at least one carotenoid (I). The oil phase is dispersed in the water phase as fine droplets of size below 1 μ m using a physiologically acceptable emulsifier (II). The novel features are that (A) contains less than 10 (preferably 1-3) wt.% glycerol, (II) is a polyoxyethylene-polyoxypropylene block copolymer (preferred) and/or lecithin and that the concentration of (I) in the oil phase is above the saturation solubility of (I) in the oil or fat at room temperature.

Abstract (de)
Stabile zur parenteralen Verabreichung geeignete, weniger als 10 Gew.-% Lecithin enthaltende, Emulsion vom Typ Öl-in-Wasser, bestehend aus einer Wasserphase und mittels eines physiologisch verträglichen Emulgators feinstverteilten dispersen Ölphase, die mindestens ein Carotinoid enthält und auf einem physiologisch verträglichen Öl oder Fett basiert, wobei man als Emulgator Polyoxyethylen-Polyoxypropylen-Blockpolymere und/oder Lecithin verwendet und das Carotenoid in der Ölphase in einer Konzentration über der Sättigungslöslichkeit des Carotinoids in dem Öl oder Fett bei Raumtemperatur vorliegt.

IPC 1-7
A61K 31/07; **A61K 9/107**; **A61K 47/10**; **A61K 47/24**

IPC 8 full level
A61K 9/107 (2006.01); **A61K 31/01** (2006.01); **A61K 31/015** (2006.01); **A61K 31/035** (2006.01); **A61K 31/07** (2006.01); **A61K 31/355** (2006.01); **A61K 31/375** (2006.01); **A61K 47/10** (2006.01); **A61K 47/24** (2006.01); **A61P 3/02** (2006.01); **A61P 43/00** (2006.01)

CPC (source: EP US)
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C-Set (source: EP US)
1. **A61K 31/375** + **A61K 31/355** + **A61K 31/07**
2. **A61K 31/375** + **A61K 2300/00**

Citation (search report)
• [X] DE 4405545 A1 19950831 - DIETL HANS [DE]
• [X] GB 918399 A 19630213 - HOFFMANN LA ROCHE
• [AD] EP 0100459 A2 19840215 - EISAI CO LTD [JP]
• [A] EP 0551638 A1 19930721 - BASF AG [DE]

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WO2014003594A1; WO2006042574A3

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US 5925684 A 19990720; AT E204472 T1 20010915; AU 1620397 A 19970918; CA 2199414 A1 19970911; CN 1074917 C 20011121; CN 1164387 A 19971112; DE 19609476 A1 19970918; DE 59704347 D1 20010927; EP 0800824 A1 19971015; EP 0800824 B1 20010822; ES 2163055 T3 20020116; JP H09328419 A 19971222

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US 81397797 A 19970310; AT 97103483 T 19970304; AU 1620397 A 19970307; CA 2199414 A 19970306; CN 97109609 A 19970311; DE 19609476 A 19960311; DE 59704347 T 19970304; EP 97103483 A 19970304; ES 97103483 T 19970304; JP 5440097 A 19970310